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SLP Practice and Assessment of Bilingual Students in Illinois

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Erin Zurek

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SLP Practice and Assessment of Bilingual Students in Illinois

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Abstract

The purpose of this study was to gain insight into the practices used by Illinois school-based SLPs in assessing bilingual students and the challenges they face. A survey made on surveyplanent.com was distributed via email through the Illinois Speech-Language-Hearing Association to gather information on typical bilingual assessment such as frequently used methods, resources available by district, and continuing education opportunities. Responses were analyzed via SPSS Statistics to understand any relationships between SLP language proficiency, years of experience, percentage of bilingual caseload, reports of graduate preparation, and continuing education opportunities with their bilingual assessment practices. The data was compared to similar studies conducted in 2007 and 2017 to note past and current trends. The results indicate little relationship between language proficiency, years of experience, percentage of bilingual caseload, reports of graduate preparation, and continuing education opportunities and assessment practices. SLPs working with bilingual students within Illinois schools face a variety of challenges, including limited time and resources as well as language and administrative barriers.

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Introduction

The population within the United States encompasses a multitude of ethnic groups and spoken languages. One of the largest minority ethnic groups in the United States is the Latino population. According to a 2019 American Community Survey, 18.4% of the U.S. population are of Hispanic or Latino descent (United States Census Bureau). As a result, there are a growing number of households that speak Spanish as opposed to English. In fact, in 2013, roughly 13% of individuals in the U.S. over the age of five report speaking Spanish in the home. According to the report, of the population who reported speaking a language other than English at home, 62% list Spanish as their home language (Ryan).

Currently, the United States is a primarily monolingual nation, with nearly 80% of the population over the age of five speaking only English in the home (Ryan, 2013). However, current trends indicate that the Hispanic population will continue to grow in the United States. According to a 2012 study, Latino children ages zero to five years constitute the fastest growing percentage of the population (Mancilla-Martinez et. al., 2016). In a 2017 report, 3.7 million ELL public school students reported Spanish as their home language, making up 74.8% of all ELL students and 7.6% of public school students grades K-12 (National Center for Education Statistic, n.d.). As such, many schools are beginning to incorporate bilingualism into classrooms. Teachers play an important part in this process, as their knowledge, attitude, and general involvement can determine its implementation and success (Rodríguez et al., 2014).

Despite the positive changes occurring within many schools, English Language Learners have been disproportionately represented in special education classrooms. A study conducted in Colorado in 1996 found that 76% of Speech-Language Pathologists working in public schools agree that minority populations are overrepresented in their speech therapy caseload (Guiberson

& Brickl, 1998). A more recent study noted the continued misidentification of language and developmental disorders in linguistically diverse students. The study found that both emerging bilinguals and English proficient bilinguals are underidentified as having a specific learning disability and/or autism, but overrepresented as having communication disabilities (CD). The study concludes that “more substantial research–practice partnerships are warranted to understand how bilingual experience and socioeconomic status interact with eligibility for special education services in public school settings.” (Yamasaki & Luk, 2018).

These studies expose the lack of accurate assessment procedures for culturally and linguistically diverse (CLD) populations, especially within the school setting. In addition, there is a clear need for further training pre and post-graduation for speech therapists to prepare them to assess CLD students. This study aims to add to current literature documenting assessment practices of bilingual students by SLPs within the schools in the state of Illinois.

Literature Review

SLP Roles and Responsibilities

Speech-language pathologists (SLPs) serve a wide variety of individuals in many settings. Assessment and intervention is especially important for school-aged children, as a disorder in communication skills can carry over to impact learning and socialization. According to the American Speech-Language-Hearing Association (ASHA), SLPs within the school setting assess and treat students experiencing a large range of communication disorders. They play a critical role in the clients' educational experiences, as they are responsible for identifying communication disorders in students and offer insight into instruction and intervention (ASHA, 2010).

School-based

As stated on the ASHA website, SLPs play a vital role "in education and are essential members of school faculties" (ASHA, 2010). Within the education setting, SLPs have a wide range of responsibilities including prevention of academic failure, assessment to identify communication disorders, intervention to tailor learning to children's needs, etc. (ASHA, 2010). Collaboration between the teachers and SLP is key to ensuring student success. Any therapy provided to a student by the SLP will have an impact on the student's performance in the classroom, and teacher input is key to implementing and documenting carryover. In the case of bilingual students, the responsibilities of teacher and SLP may overlap, as is stated in ASHA's 1998 position statement "Provision of Instruction in English as a Second Language by Speech-Language Pathologists in School Settings" (1998). Therefore, it is critical that school-based SLPs are prepared to offer services to culturally and linguistically diverse (CLD) and/or bilingual students.

Bilingual Students

As the United States population continues to diversify, it is the responsibility of the SLP to provide “culturally competent services” (ASHA, 2010). As the demographics in schools change to reflect the diversifying population, schools are faced with the challenge of meeting the changing learning needs of students, which is heavily affected by their cultural and linguistic background. As such, it is the SLPs’ responsibility to address language and literacy goals across a range of disorders and to attend to “students who are culturally and linguistically diverse” (ASHA, 2010). Not only is it the SLPs responsibility according to ASHA, but federal laws are focusing more on adjusting educational options to fit the needs of students from culturally and/or linguistically diverse households. SLPs have a unique perspective into those needs as the experts in communication and language within the school, and therefore they must continue to learn how best to serve students to decrease the existing achievement gaps (ASHA, 2010).

Training

As the SLP plays such a critical role in the social and academic success of students, it is imperative they receive appropriate preparation to assess and treat students from all backgrounds, including CLD backgrounds, beginning at the graduate school level in courses and internship experiences. Notwithstanding, the field of communication disorders is not stagnant; it is constantly evolving as new research emerges. Therefore, it is the responsibility of the certified SLP to continue to learn and grow throughout their career, especially when working in settings with CLD students.

Graduate School

When assessing and treating CLD populations, it is neither necessary nor sufficient to simply speak more than one language or have a diverse background. As Lazewnik et. al. say,

“Even bilingual professionals who know the native language may make errors in the identification, assessment, or treatment of a bilingual child, if they are not aware of the cultural and linguistic characteristics of the specific minority culture and appropriate assessment and intervention strategies” (2010). Cultural diversity instruction in graduate school is necessary for the future success of SLPs when working with diverse populations. Second language acquisition is different from typical language development; graduate programs need to teach SLPs how learning English as a second language may result in a language difference and not indicate a disorder. It is believed that CLD students are disproportionately identified as having a communication disorder, despite the SLP’s roles in the education setting including accurate diagnosis of disability “regardless of the students’ cultural, linguistic, or socioeconomic backgrounds” (ASHA, 2010). In fact, a 1996 study found that 76% of Colorado SLPs agreed that CLD students are overrepresented in their caseloads (Guiberson & Brickl, 1998). This problem still persists today due to lack of specialized training for the assessment of CLD students and evidence based practice (EBP; Yamasaki & Luk, 2018). In addition to courses in bilingualism and cultural differences, it is beneficial to the SLP and their future culturally and linguistically diverse clients to have practical experience in internship and shadow opportunities with CLD clients.

According to the “2020 Standards and Implementation Procedures for the Certificate of Clinical Competence in Speech-Language Pathology” Standard IV-B, in order to become ASHA certified as an SLP, the individual must have an understanding of the linguistic and cultural bases of basic human communication. Standard IV-C states that “the applicant must have demonstrated knowledge of [communication] disorders and differences, including appropriate etiologies, characteristics, and ... linguistic and cultural correlates in the following areas: ... receptive and

expressive language, ... and social aspects of communication” (Council for Clinical Certification in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association, 2018). Standard IV-D emphasizes the need for future SLPs to have an understanding of the prevention, assessment, and intervention of communication disorders and the linguistic and cultural correlates that may impact them. Finally, Standard V-F continues into the internship experience of individuals applying to become certified SLPs. It states that “supervised practicum must include experience with individuals across the life span and from culturally/linguistically diverse backgrounds.” (Council for Clinical Certification in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association, 2018). Despite the numerous qualifications in assessing and treating linguistically and culturally diverse individuals a graduate student must meet to become an ASHA certified SLP, the aforementioned research indicates that the preparation at the graduate level is insufficient to be fully a competent clinician in CLD populations, resulting in a further need for ongoing professional development.

Continuing education

Not only should SLPs be receiving instruction and training for assessing culturally and linguistically diverse students in graduate school, but they should also be committed to “lifelong learning” (ASHA, 2010). The field of communication disorders is constantly changing, therefore it is the responsibility of the SLP to be up-to-date with research supporting and refuting therapy techniques and assessments. This can come in the form of seminars and conferences as well as continuing education (CE) opportunities such as courses or specialized lectures. The ASHA code of ethics, principle II A emphasizes that SLPs certified by ASHA can only assess and treat individuals and diagnoses that they have properly received education and training to engage in. Principle II D goes on to enforce that all SLPs are responsible for their own professional

learning, and should engage in CE as it pertains to their professional skill needs (ASHA, 2016). Notwithstanding, research indicates that SLPs working directly with CLD students typically haven't received the specialized training expected of them in the ASHA code of ethics.

In a 2010 study, only 72% of SLPs in Colorado reported having any specialized training in working with CLD clients from graduate school and beyond. In fact, roughly half of the Colorado SLPs reported feeling less than competent in assessing and treating multilingual students (Guiberson & Atkins, 2010). This study is particularly telling due to the fact that Colorado is a linguistically diverse state, with 16.7 percent of the population speaking a language other than English in the home (Ryan, 2013). If SLPs working in diverse states report feeling less than competent assessing and treating multilingual students, there is clearly a need for additional training and CE specific to the assessment of CLD students for SLPs. Not only that, but a better understanding of typical language development in bilingual children in order to note significant delays.

Language Development and Impairment in Bilingual Students

One of the greatest challenges in understanding the development of a second language in bilingual children is the innumerable variables that impact the acquisition of both the first language (L1) and second language (L2). In order to effectively distinguish language difference from disorder in bilingual children, SLPs must have an understanding of how second language acquisition differs from first language acquisition and to be familiar with the development of specific aspects of language (morphemes, semantics, syntax, etc.) in children from a diverse language background. (ASHA, 2004).

Typical bilingual language development

When acquiring English as a second language, a child typically goes through four distinct, observable stages. The first stage is defined by the child's use of the home language. Often only lasting several days, the child uses their native language when communicating with the children and teachers in the unfamiliar environment. This stage is brief in typical development, as the child quickly realizes that their communication partners do not speak their native language. Following this stage, ELLs enter a nonverbal period. This does not indicate a communication delay. Some argue it is a critical stage to language acquisition as their receptive knowledge of the language increases; therefore, exposure to both social and academic language is important. Typically in this stage, a child relies primarily on nonverbal cues or gestures to communicate needs (Paradis et al., 2011).

ELLs begin to noticeably speak English in the third stage of second language development, defined by the use of formulaic language. Oftentimes, utterances are short or parroted sentences. Common utterances in this stage include rote phrases such as "I don't know", "excuse me", or "what's happening?". Though ELLs in this stage of language development have a limited vocabulary, they are able to give the impression they know the language and can engage in social interaction successfully by relying on commonplace phrases. Finally, the child enters into the fourth stage, productive language use. This by no means indicates the child is fluent in English or will no longer make vocabulary and grammatical errors, merely that they have acquired enough language comprehension to form unique, productive utterances (Paradis et al., 2011). Though research has indicated children learning English as a second language typically acquire the language in these four stages, there are several other factors of language development to consider.

One of the biggest impacts on language development in the secondary language of bilingual speakers is the age of acquisition. A child who is first exposed to English at birth will develop language differently than a child who begins learning English when they enter school. One study revealed new information on the optimal timing of language exposure. In their study, Jasińska and Petitto (2018) found that children who were first exposed to English between the ages of four and six, around the time formal schooling begins, made incredible gains in language and literacy learning. By fourth grade, they matched the performance of their monolingual peers. Another study looked at bilingual children and how grade level, age of English exposure, and length of exposure impacted development of their first language (L1), Spanish, and their second language (L2), English. It found that as length of exposure to L2 increased, the age of acquisition became less important (Bedore et. al., 2016). This as well as other studies reveal the amount of exposure the child receives with each language has as much impact as the age of exposure. (Sheng et. al., 2013). Therefore, both age of language exposure and amount of language exposure must be considered when tracking a student's language acquisition progress.

As leaders in education are somewhat divided over whether it is beneficial to children to allow them to develop more than one language simultaneously, it is important to discuss the research supporting bilingualism and the benefits it offers children. Researchers have begun to find many benefits of bilingualism in children, including promoting metalinguistic awareness, cognition, school achievement, and cross-cultural awareness and understanding (Rodríguez et al., 2014). However, many of these benefits are not seen, as bilingual children are not always equally supported in both their languages. For example, one study found that bilingual individuals taught in an English only instructional setting scored consistently below the overall population of students tested (Grimm et. al., 2018). This may make differentiating between language difference

and disorder more difficult. However, with proper support and accurate testing, the benefits of bilingualism can be seen in language development. In addition, there are key differences in the errors made by a typically developing child acquiring English as a second language from an ELL student with a language impairment.

Language impairment in bilingual individuals

Though bilingual and culturally diverse students are overrepresented in special education classes, there are still bilingual students who have language impairment. It is important to be able to recognize a language difference from a language disorder. The following indicators of primary language impairment (PLI) in English language learners (ELLs) are taken from a table in Robert A. Pieretti and Celeste Roseberry-McKibbin's article titled "Assessment and Intervention for English Language Learners With Primary Language Impairment: Research-Based Best Practices" (2015). A number of factors were sourced by the authors from other articles.

The key to identifying language impairments in linguistically diverse students is to compare their language abilities to peers of "similar cultural, linguistic, and socioeconomic background". Compared to these peers, students identified as having a PLI present with delays in primary language acquisition, vocabulary deficits in both the native language and English often resulting in the overuse of general terms such as *stuff*, *things*, etc., short mean length of utterance (MLU), and trouble with narrative skills. Other behaviors can also indicate PLI such as difficulty paying attention, general disorganization or confusion, frequent requests for repetition, and communication difficulties with peers from a similar background (Pieretti & Roseberry-McKibbin, 2015). This is not a comprehensive list, and as variables such as age of acquisition and amount of exposure also affect language ability, identification can be tricky and is not a one-size-fits-all process (Lazewnik et. al., 2019).

Assessment of Bilingual Students

In assessing CLD students, ASHA recommends a comprehensive review of the student's case history that includes information regarding cultural, linguistic, and familial differences. This information should come from a number of sources, including family members, teachers, bilingual professionals, and culturally matched paraprofessionals. The SLP must also consider that even though proficiency in social language may develop within the first 2 years of exposure to English, it may take an additional 5 years for academic language proficiency to develop (ASHA, 1999). Therefore, they should consider language ability in and out of the classroom when assessing for language impairment. Assessing the child in varied settings using multiple methods would ensure that a realistic picture of both academic and social language has been obtained, and reduce the likelihood of cultural and linguistic biases impacting results (ASHA, 2004). The methods of assessment included in this study are standardized assessment administered in the student's native language and English, language sample in the student's native language and English, parent reports, nonword repetition, and dynamic assessment.

Types of assessment

ASHA defines standardized assessment as “empirically developed evaluation tools with established statistical reliability and validity” (*Assessment Tools, Techniques, and Data Sources*, n.d.). Standardized assessments have the advantage of being tested for their reliability and specificity. However, these tests are often normed on monolingual populations, and therefore cannot always provide an accurate picture of bilingual population language ability. A 2017 study based in a California school district found that standardized assessment administered in one language proved ineffective without non-standardized supplementary information when assessing bilingual Latino students. Despite that, the study showed that SLPs relied heavily on

and routinely tested their CLD students with standardized assessments administered in English (Kracmer & Fabiano-Smith, 2017). Several informal means of assessment can prove to be equally or more effective than standardized assessments administered in English and/or the student's native language, such as language sampling.

ASHA merits language sampling as an effective way to “elicit spontaneous language in various communication contexts and then derive measures to complement data obtained from standardized language assessments” (*Assessment Tools, Techniques, and Data Sources*, n.d.). Language samples can be taken with a variety of communication partners within multiple familiar and unfamiliar contexts in order to gain a full understanding of the student's communicative abilities, and from the samples SLPs can gather syntactic information such as mean length of utterance (MLU) and use of subordinate clauses (*Assessment Tools, Techniques, and Data Sources*, n.d.). Conversational speech sampling offers the SLP insight into the individual's expressive and receptive language, pragmatic ability, and semantic and syntactic knowledge (Roseberry-McKibbin & O'Hanlon, 2005). As this form of assessment is easily adapted and offers insight into the student's abilities in multiple domains of language, language sampling should be considered in assessing CLD students.

Parent reports, another informal assessment tool, offer additional insight into the child's native language ability. This may include “rating scales, checklists, inventories, and questionnaires completed by the family members/caregiver” (*Assessment Tools, Techniques, and Data Sources*, n.d.). Many research studies have found it to be an effective tool, cost efficient, and easily adapted to specific language concerns. One such study found parent/guardian reports to be a valid measure in assessing bilingual children's vocabulary. The parent reports used in this study provided accurate information on vocabulary knowledge in both the native language and

English regardless of the percentage of language use of each in the home environment (Mancilla-Martinez et. al., 2016). When analyzed in conjunction with other formal/informal assessments, parent reports can give SLPs a better understanding of the individual's total language ability.

In addition to understanding CLD students' language ability, knowing how well they learn new information and gain new skills can help SLPs differentiate between language differences and disorders (*Dynamic Assessment: Two Major Outcomes*, n.d.). Dynamic assessment (DA) is a method of conducting a language assessment which seeks to identify the skills that an individual child possesses as well as their learning potential. The benefit of using DA is that the individual being assessed does not have to have specific language skills or words in their vocabulary. With DA, SLPs are better able to differentiate between language difference and disorder by monitoring the individual's progress within sessions. Language disorder can present when the individual continues to make the same errors or cannot generalize a task (*Dynamic Assessment*, n.d.). Research has shown that DA can be an effective way to predict bilingual children's language ability, specifically their vocabulary learning skills. DA tasks have the advantage of being modifiable, therefore easily adapted based on the individual's primary language (Kapantzoglou, 2012).

Finally, nonword repetition task (NWRT), a method of dynamic assessment, is an assessment of an individual's phonological and morphological abilities. As the name suggests, it does not rely on the individual's vocabulary or prior knowledge. Rather, individuals repeat a series of nonsense words - sequences of syllables without semantic meaning in any language - with a variety in complexity of sound sequencing. This allows the SLP to gain an idea of their language as well as cognitive abilities without prior instruction (*Nonword Repetition Tasks*, n.d.).

Though this task is effective, it is also more skill specific; as previously mentioned, it should be used in conjunction with multiple forms of assessment. Overall, there is a wide variety of assessment methods and in order to accurately assess CLD students, it is important to consider information on their language ability from multiple sources (ASHA, 2004).

Assessment Challenges

As previously mentioned, many SLPs experience difficulty getting an accurate representation of bilingual students' language abilities. As such, a disproportionately high number of minority students are placed in special education programs. The root of this problem is the fact that when assessments are administered in English, they fail to evaluate the true semantic knowledge of the ELL student, but instead evaluate their knowledge of the English language. Though standardized assessments are easy and quick to administer, they are not always the best tool. Even administering the assessment in the students' native language does not always yield accurate results. Tests that were initially designed for and normed on monolingual children provide skewed insights into bilingual language development. For example, children exposed to English and Spanish in the United States do not score as high on the Test de Vocabulario en Imágenes Peabody, the Spanish translation of the Peabody Picture Vocabulary Test, as their monolingual counterparts in Spain and Mexico (Peña et. al., 2003).

Programs that measure a child's oral language and early literacy skills in both Spanish and English grant a better picture of the overall capability and individual education needs of each child (Carta et al., 2015). However, many school-based SLPs do not have the time or resources to assess students in multiple ways, despite evidence proving it to be the most accurate way to diagnose language impairment in CLD diverse students. Informal assessment tools, including the aforementioned language sampling, observations, and parent/teacher reports, can easily be

overlooked in assessing CLD students in school due to the fact that they take longer and may be seen as incompatible with larger caseloads (Guiberson & Atkins, 2010). There is a clear need to educate and support schools so that they may see the importance of using these forms of assessment.

Previous surveys of assessment in school settings

Two previous surveys have gathered information on types of assessment used by school-based SLPs with bilingual learners, as well as continuing education opportunities: “Bilingual Language Assessment: Contemporary Versus Recommended Practice in American Schools” by Graciela Arias and Jennifer Friberg (2017) and “The State of School-Based Bilingual Assessment: Actual Practice Versus Recommended Guidelines” by Lena Caesar and Paula Kohler (2007). These studies aimed to compare the ASHA recommended practices in bilingual assessment to the actual practices used by SLPs. The 2007 study was limited to SLPs in Michigan. It asked participants to list their 5 most frequently used tests or informal procedures. In addition, there was a portion for participants to rate how frequently they used a list of methods, including assessing in both the student’s native language and English, using parent and teacher reports, observation in classroom and at play, and using an interpreter. No participants listed DA as one of their most frequently used procedures. 49.5% of participants reported using the Peabody Picture Vocabulary Test - Third Edition, a standardized assessment, as their most frequently used assessment procedure with bilingual students. Less than half of the respondents reported using an interpreter, even though 98% were monolingual English speakers, and only one third reported adapting their procedures and tests for bilingual students. Finally, only 28% of the respondents felt that their graduate education sufficiently prepared them to assess bilingual

students, and 11% felt they had enough practical experience working with bilingual clients in graduate school (Caesar & Kohler).

The 2017 study was slightly different. Participants practiced in 34 different US states. The 2017 study also had a question asking for participants' 5 most frequently used tests and informal procedures, but expanded the section asking for ratings to include more specific practices including interviews, language sampling, and dynamic assessment. 36% of respondents reported using language samples in English and the child's native language as an assessment tool and 74% reported using parent/caregiver reports; standardized assessments were also commonly reported. Despite the decreased reliance on standardized assessment, more than half of the SLPs felt that their graduate school training had not adequately prepared them for assessing bilingual students (Arias & Friberg).

Though the percentages improved in the ten years between the surveys, the results of both studies show that most SLPs did not feel that their graduate education had adequately prepared them to appropriately assess bilingual populations. In addition, both studies noted a heavy reliance on standardized assessments administered in English, which have proven to be an inaccurate means of assessing bilingual populations if not considered with other forms of assessment (Caesar & Kohler, 2007; Arias & Friberg, 2017). Neither study tested variance in assessment practices based on the years of experience of the SLP or on the area the SLP served (rural, suburban, urban).

Thus, the current study was designed to focus on assessment practices and continuing education of SLPs who work with bilingual students in the state of Illinois. This study aims to answer the following questions:

Research Question 1: Do practices in assessing bilingual students within Illinois vary by each of the following criteria:

- a. Language proficiency of the SLP in a language other than English?
- b. Years of experience of the SLP within school settings?
- c. Percentage of the SLP's caseload identified as bilingual?
- d. Reports of graduate school preparation?
- e. Continuing education opportunities?

Research Question 2: What are the most commonly reported challenges of school-based SLPs in assessing bilingual students?

Research Question 3: How do the results of this survey compare to similar surveys administered in 2007 and 2017 in each of the following criteria:

- a. Reports of graduate school preparation?
- b. Reliance on standardized assessments administered in the student's native language or English?
- c. Use of dynamic assessment?

Methods

This research study took the form of an online survey. The questions included were framed by previous surveys administered by Lena Caesar & Paula Kohler (2007) and by Graciela Arias & Jennifer Friberg (2017). During the editing process, two bilingual SLPs working in schools in central Illinois reviewed the survey and provided feedback. The final survey was created on the website www.surveymonkey.com and accessible with any smartphone, tablet, and computer with an internet connection.

In the beginning of the survey, the term “bilingual” was defined in order to avoid any confusion with other uses of the term. In addition, participants were asked to consider their caseloads and means of assessment used in a typical school year, as COVID-19 policies and procedures had likely greatly affected their methods of assessment and student population (Appendix C). The survey contained a total of 29 questions including 14 multiple choice questions, 4 short essay questions, and 11 rating questions. The first two questions centered around whether participants qualified for the study. Namely, the questions asked if the participant was currently working as a school-based SLP and if they currently had bilingual students on their caseload. Participants who answered “no” to either question were directed to a closing message and not able to respond to the remaining questions.

The survey began with demographic questions and information on the school districts that the participants served. A series of questions regarding assessment practices and the frequency in use followed; the questions were formatted as multiple-choice, with answer options listed in order of increasing frequency (Never, Rarely, Sometimes, Often, Almost always). The survey included questions regarding the SLPs preparedness for assessing bilingual students in the form of statements with which participants would choose responses that best fit their experience

(Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree). The survey concluded with open response questions in which participants could add any additional information they felt comfortable sharing that was relevant to the study. The survey questions can be found in Appendix ____.

The Eastern Illinois University (EIU) Institutional Review Board (IRB) granted approval for this study on August 26th, 2020 (IRB 20-085). Following IRB approval, researchers completed an application for distribution through the Illinois Speech-Language-Hearing Association (ISHA). After submitting the cover letter, survey, IRB approval, and a request for distribution, the survey was approved for distribution and was distributed through ISHA beginning on September 16th, 2020. All ISHA members received the survey, but the cover letter specified that participants should be currently working in schools with bilingual students. All ISHA members that fit those criteria were invited to participate at no risk to themselves. The cover letter distributed with the link to the survey informed participants that by submitting their responses, they consented to the use of their answers in the study. Participation was voluntary and the survey could be discontinued should an SLP choose not to submit their answers. The survey was available for submissions from September 16th, 2020 to November 8th, 2020 via a hyperlink included with the email. Participants were informed that the survey would take less than 10 minutes and that no identifying information would be shared in the results of the study.

A total of 36 SLPs participated in this survey, of which 24 met the criteria of the study. Of those 24, 23 identified as female and 1 selected “prefer not to answer”. Participant age ranged from 20-29 years of age to 60+. 21 participants identified as white, 1 identified as “other” and wrote in “Middle Eastern”, and 2 participants selected “prefer not to answer”. When provided with a list of Illinois counties divided into regions, participants were asked to select the region

that contained the county/counties they served. 83.3% of respondents serve schools in the northeast region of Illinois, 4.2% serve the northwest region, 8.3% serve the east region, and 4.2% serve the south region. Of all the SLPs working with bilingual students, 45.8% spoke another language in addition to English.

The survey was closed on November 8th, 2020. The surveyplanet site generated summary data on graphs that gave insight into demographic information previously listed.

Results

Data was summarized based on the scaled ratings and open response questions included in the survey in order to answer the study's research questions. Correlation analyses were conducted using SPSS.

SLP Bilingual Assessment Practice Trends

Participants were asked a series of questions regarding the frequency with which they used certain assessment procedures (i.e., dynamic assessment, standardized assessment administered in English, standardized assessment administered in the student's native language, language sample in English, language sample in student's native language, parent reports, and nonword repetition tasks) to identify a language disorder in bilingual students on their caseload. Participants were provided with a likert-like five-point-scale to respond (never, rarely, sometimes, often, almost always). Table 1 shows the frequency of use for each form of assessment in percentages. These scaled responses were then compared using correlations with language proficiency of the SLP in a language other than English, years of experience of the SLP within school settings, percentage of the SLP's caseload identified as bilingual, reports of graduate school preparation and continuing education opportunities.

Table 1: Assessment Procedure Frequency in Percentages

Frequency	DA	SA English	SA native language	Language Sample: English	Language Sample: native language	Parent Report	Nonword Repetition
Never	16.67%	8.33%	16.67%	4.17%	8.33%	-	37.50%
Rarely	16.67%	12.50%	4.17%	12.50%	20.83%	-	37.50%
Sometimes	12.50%	37.50%	16.67%	37.50%	16.67%	25%	16.67%
Often	20.83%	12.50%	25%	25%	20.83%	25%	8.33%
Almost Always	33.33%	29.17%	37.50%	20.83%	33.33%	50%	-

Language Proficiency

Of the 24 respondents, 54% ($n = 13$) indicated that they were not proficient in a language other than English; of the 46% ($n = 11$) respondents proficient in a language other than English, 81.8% ($n=9$) listed they were proficient in Spanish, 9.1% ($n=1$) listed both French and Spanish, and 9.1% ($n=1$) listed Arabic. The first form of assessment respondents were asked to rate their frequency of use was dynamic assessment (DA). Almost half, 45.5%, of the multilingual respondents indicated that they used dynamic assessment 'often' or 'almost always' as opposed to 61.6% of the monolingual SLPs. The primary pattern here is that monolingual SLPs used DA at higher frequencies. However, 27.3% of multilingual SLPs used it 'sometimes', while none of the monolingual SLPs indicated this. Over a fourth, 27.3%, of multilingual SLPs used it never or rarely, as opposed to the 38.5% of monolingual SLPs. Table 2 shows the correlations between the frequency in use of assessment practices and the respondents' language proficiency. Only one weak yet significant positive relationship between language proficiency in a language other than English and obtaining a language sample in the student's native language, $r(24) = 0.463$, $p = 0.023$.

Table 2: Correlation between SLP language proficiency and frequency of assessment practice

Form of Assessment	# of Respondents	r	p
Dynamic Assessment	24	-0.007	0.974
SA English	24	-0.172	0.421
SA Native Language	24	0.182	0.395
Language Sample English	24	0.074	0.73
Language Sample Native Language	24	0.463	0.023*
Parent Report	24	0.025	0.907
Non-Word Repetition	24	-0.227	0.285

* indicates the correlation is significant

Years of Experience

A wide range of experience working as SLPs in the school setting was represented in the sample. Four of the 24 respondents reported having 0-5 years of experience working as school-based SLPs, 6 reported 6-10 years, 4 reported 11-15 years, 4 reported 16-20 years, 3 reported 21-25 years, 1 reported 26-30, and 2 reported 31 or more years of experience working as a school-based SLP. Table 3 notates the correlations between the SLP's years of experience in a school setting and the frequency in use of assessment practices. A weak but significant negative relationship was found between years of experience and the frequency in use of dynamic assessment, $r(24) = -0.508$, $p = 0.011$.

Table 3: Correlation between SLP years of experience in schools and frequency of assessment practice

Form of Assessment	# of Respondents	r	p
Dynamic Assessment	24	-0.508	0.011*
SA English	24	-0.017	0.937
SA Native Language	24	-0.006	0.978
Language Sample English	24	0.263	0.214
Language Sample Native Language	24	-0.112	0.603
Parent Report	24	-0.077	0.72
Non-Word Repetition	24	-0.316	0.132

* indicates the correlation is significant

Percentage of Bilingual Caseload

Participants were asked to write in a whole number that best reflected the percentage of their caseload identified as bilingual. Responses from the 24 participants included 14 unique percentages with a range of 3 to 100 (mean = 47.3, SD = 36.5). A weak but significant positive correlation was noted between the frequency with which the SLP obtains a language sample in

the student's native language and percentage of their caseload that is identified as bilingual, $r(24) = 0.466$, $p = 0.022$. Based on the fact that both the language proficiency of the SLP and the bilingual percentage of their caseload were positively correlated with obtaining a language sample in the student's native language, an additional correlation with the aforementioned criteria was run. A significant positive correlation was found between the language proficiency of the respondent in a language other than English and the percentage of their caseload identified as bilingual, $r(24) = 0.678$, $p < 0.001$.

Table 4: Correlation between percentage of caseload identified as bilingual and frequency of assessment practice

Form of Assessment	# of Respondents	r	p
Dynamic Assessment	24	0.168	0.433
SA English	24	-0.299	0.156
SA Native Language	24	0.219	0.304
Language Sample English	24	0.249	0.242
Language Sample Native Language	24	0.466	0.022*
Parent Report	24	0.106	0.622
Non-Word Repetition	24	-0.163	0.446

* indicates the correlation is significant

Reports of Graduate School Preparation

Participants were asked whether they agreed with the statement "I believe that my graduate education provided me with opportunities to gain practical, clinical experience conducting language evaluations with bilingual students." and responded using a Likert scale (strongly disagree, disagree, neither agree nor disagree, agree, strongly agree). No respondents reported strongly agreeing with the statement. 6 of the 24 respondents strongly disagree, 10 disagree, 3 neither agree nor disagree, and 5 agree. No significant correlations (Table 5) were found between reports of graduate school preparation and assessment practices.

Table 5: Correlation between reported graduate school preparation and frequency of assessment practice

Form of Assessment	# of Respondents	r	p
Dynamic Assessment	24	0.141	0.51
SA English	24	0.034	0.875
SA Native Language	24	-0.229	0.282
Language Sample English	24	0.247	0.244
Language Sample Native Language	24	0.073	0.736
Parent Report	24	0.296	0.16
Non-Word Repetition	24	-0.072	0.739

Continuing Education Opportunities

Participants were asked whether they agreed with several statements concerning continuing education opportunities as they relate to bilingual assessment and responded using a Likert scale. The first related to national conventions: “I gain practical information for the assessment of bilingual clients from national conventions.”. Of the 24 respondents, 3 disagree, 11 neither agree nor disagree, 3 agree, 2 strongly agree, and 5 reported that the question was not applicable as they did not attend national conventions. The second statement was as follows: “I gain practical information for the assessment of bilingual clients from state conventions.”. 2 respondents strongly disagree, 3 disagree, 10 neither agree nor disagree, 3 agree, 4 strongly agree, and 2 reported that the question was not applicable as they did not attend state conventions. Finally, participants were asked about online continuing education opportunities: “I gain practical information for the assessment of bilingual clients from online courses.”. 4 disagree, 12 neither agree nor disagree, 4 agree, 3 strongly agree, and 1 reported that the question was not applicable as they did not complete online courses.

SLP Bilingual Assessment Challenges

The respondents to the survey were asked to identify their biggest challenges in assessing bilingual students by giving an open-ended response. Twenty-four responses were recorded with varying length. Qualitative review of the written responses resulted in identification of four distinct categories: time, language/cultural differences, resources, and administrative challenges. Overall, 44 challenges were reported, including 7 challenges related to time, 15 to language or cultural differences, 16 to available resources, and 6 to administrative difficulties. Many challenges within these categories were reported by more than one respondent. For example, 3 reported that they had difficulties assessing students in both English and their native language within the allotted time (time). Eight reported being unable to or having difficulty finding interpreters or SLPs who speak the student's native language (language or cultural differences). Regarding both language and resource challenges, 4 reported having difficulties differentiating between a language difference and disorder.

Bilingual Assessment Preparedness

One of the goals of this study was to identify changes over time in reports of graduate school preparation as it concerns the assessment of bilingual students, dependence on standardized assessments to diagnose language disorder in bilingual students, and the use of dynamic assessment. Our present study found that 20.8%(n=5) of respondents agreed that they were provided with practical experience in assessing bilingual clients as part of their graduate education. 29.2% of respondents (n=7) indicated that they almost always administer standardized assessments in English when assessing bilingual students, 12.5%(n=3) administered SA in English often, 37.5%(n=9) indicated that they did so sometimes, 12.5%(n=3) indicated rarely, and 8.3%(n=2) indicated that they never administer standardized assessments in English when

assessing bilingual students to determine a language disorder. However, 37.5%(n=9) of respondents reported administering standardized assessments in the students native language almost always, 25%(n=6) often, 16.7%(n=4) sometimes, 4.2%(n=1) rarely, and 16.7%(n=4) never. Results of the current study found that 12.5%(n=3) of respondents used dynamic assessment sometimes and 54.2%(n=13) used it often or almost always when assessing bilingual students.

Discussion

Overall, SLPs appear knowledgeable in the assessment of bilingual students to determine language disorders. However, they face many challenges that may prevent them from doing so. This study adds to the literature on bilingual assessment, including previous surveys that served as models, the results of which will be used as comparison to denote trends over time.

Assessment Practices versus ASHA Guidelines

The American Speech-Language-Hearing Association (ASHA) has a series of guidelines that inform SLPs on appropriate assessment practices to determine a language disorder in bilingual students. According to Role 5.0 of *Knowledge and Skills Needed by Speech-Language Pathologists and Audiologists to Provide Culturally and Linguistically Appropriate Services*, speech-language pathologists must be competent in the identification and assessment of typical and disordered language (2004). Role 5.2 A states that the SLP must demonstrate “appropriate use of published test materials in language assessment including standardized norm-referenced tests and criterion-referenced tests, including analyzing normative sampling limitations, general psychometric issues especially related to validity and reliability, and inherent cultural and linguistic biases in these test materials.” (ASHA, 2004). The document further explains that assessments that fail to meet these standards, such as translated tests, should only “be used as informal probes, with no accompanying scores (Role 5.2 B & C; ASHA, 2004). A vast majority of respondents (79.17%) reported administering a standardized assessment in English at least sometimes when determining a language disorder in bilingual students, and the same percentage report administering a standardized assessment in the student’s native language. This study did not include questions regarding further use of the test material including analyzing the normative sample and any cultural and linguistic biases.

The results of this study add to the evidence found by Arias and Friberg's "Bilingual Language Assessment: Contemporary Versus Recommended Practice in American Schools" (2017) and Caesar and Kohler's "The State of School-Based Bilingual Assessment: Actual Practice Versus Recommended Guidelines" (2007) regarding the assessment practices of SLPs with bilingual students. We compared the surveys by the SLPs' reports of preparation from graduate school education, SLP reliance on standardized assessments administered in English or the student's native language, and the frequency in use of dynamic assessment by SLPs.

The 2007 study asked respondents to list the 5 forms of assessment they used most frequently in assessing bilingual students. 51 procedures were listed by the 130 respondents. Among the 10 most frequently listed assessment procedures, 6 were standardized assessments administered in English. 49.5%(n=51) reported using the *Peabody Picture Vocabulary Test—Third Edition*, 35%(n=36) listed *Clinical Evaluation of Language Fundamentals—Third Edition*, and 32%(n=33) listed the *Expressive One-Word Picture Vocabulary Test—Revised*. Alternatively, 33%(n=34) reported gathering a language sample of an unspecified language from the student and 22.3%(n=23) reported using parent or teacher interviews in their assessment.

The 2017 study both asked participants to list their top 5 forms of assessment, formal and informal, and asked them to rate the frequency with which they used listed techniques and assessment measures. 60% (n = 77) of respondents of the 2017 study reported completing assessment in the child's native language and English often. In terms of frequently used assessment measures, of the 10 most frequently reported measures, 7 were standardized assessments. The *Clinical Evaluation of Language Fundamentals—Fourth Edition* administered in Spanish was the second most commonly listed assessment (n=37). The *Preschool Language Scale - Fifth Edition* administered in English and Spanish was the third and fourth most

commonly listed assessment, respectively (n=34, n=34). 30 respondents reported using the *Expressive One-Word Picture Vocabulary Test—Revised* administered bilingually. 27 reported using the *Receptive One-Word Picture Vocabulary Test—Fourth Edition* in Spanish and 22 in English. The tenth most frequently used form of assessment was the *Expressive One-Word Picture Vocabulary Test—Revised* administered in English (n=21). The current study did not provide an opportunity for respondents to list their most frequently used forms of assessment. However, a vast majority report using standardized assessments in English and the student's native language, as similarly reflected in the most common assessment tools reported in both the 2007 and 2017 study. This would indicate a continued over reliance on standardized assessments that can prove inaccurate in assessing bilingual students. Nonetheless, standardized assessments can be an effective tool when used in combination with informal assessment tools, such as dynamic assessment.

Role 5.2 D of *Knowledge and Skills Needed by Speech-Language Pathologists and Audiologists to Provide Culturally and Linguistically Appropriate Services* states that the SLP has the responsibility to demonstrate “appropriate use of alternative approaches to assessment including dynamic assessment, portfolio assessment, structured observation, narrative assessment, academic and social language sampling, interview assessment tools, and curriculum-based procedures, including analysis of validity, reliability, and inherent cultural and linguistic biases.” (ASHA, 2004). Respondents to the 2007 study did not list dynamic assessment as an informal procedure used with bilingual students. The 2017 study found that 28% of respondents(n=36) utilized dynamic assessment in conjunction with formal language tests often (70%-100% of the time) and 28% of respondents(n=36) utilized it sometimes (40%-69% of the time; Arias & Friberg). Of the respondents to the current study, 66.67% report using dynamic

assessment at least sometimes. This would indicate an increase in the use of dynamic assessment in determining a language disorder in bilingual students over time. A majority of respondents of the current study (66.7%) used dynamic assessment at least sometimes when determining language disorder in bilingual students. Similarly, many respondents (83.3%) report collecting a language sample in English and 70.83% report collecting a language sample in the student's native language when determining a language disorder. All participants (100%) reported using parent reports at least sometimes when determining language disorder in bilingual students. Though high percentages of SLPs are using standardized assessments, it would appear that they are supplementing the scores with alternative approaches that lend better to bilingual assessment. By using a combination of standardized assessments and informal assessment tools, SLPs are better able to understand the student's global language performance, rather than assess their knowledge of only the English language. By utilizing parent reports, SLPs can gain insights into the student's development of their native language. By employing dynamic assessment, SLPs can understand how well the student learns. Overall, it can be said that many SLPs in Illinois are complying to ASHA guidelines in the assessment of language disorders in bilingual students.

SLP Bilingual Assessment Practice Trends

The first research question of this study addressed patterns in assessment practices based on these variables: the language proficiency of the SLP in a language other than English, the years of experience of the SLP within school settings, the percentage of the SLP's caseload identified as bilingual, the reports of graduate school preparation, and continuing education opportunities available to and sought out by the SLP. Three significant correlations were found between these criteria and the seven forms of assessment included in the survey.

A weak yet significant positive relationship was found between the language proficiency of the SLP in a language other than English and obtaining a language sample in the student's native language. This is a logical relationship, as it would be easier to obtain and analyze a language sample in the student's native language if the SLP is proficient in the child's native language. Of the multilingual SLPs, a majority of them identified they were proficient in Spanish. Spanish is the second most spoken language in the United States, making it likely that more bilingual students on an SLP's caseload will speak Spanish as their native language. However, as the respondents were not provided a space to list the native languages of the bilingual students on their caseload, this cannot be determined conclusively.

In addition to this correlation, a weak but significant negative relationship was found between the years of experience of the SLP and the frequency in use of dynamic assessment when assessing bilingual students for a language disorder. This would indicate that SLPs with more years of experience in schools are less likely to use dynamic assessment. This relationship is somewhat surprising. This may indicate changes in graduate curricula over the years as dynamic assessment has become more prevalent. However, as neither the term dynamic assessment was not defined in the question nor were examples of dynamic assessment tasks provided, it is possible that some respondents were confused, which might have skewed results.

Finally, a weak but significant positive correlation was noted between the use of language sampling in the student's native language and percentage of caseload identified as bilingual. This would indicate that the higher the percentage of bilingual students on the SLP's caseload, the more likely the SLP is to obtain a language sample in the students' native languages when assessing for a language disorder. It is important to note that this correlation does not consider the relative size of each of the respondents' caseloads (i.e., responses ranged from 15 to 60

clients, with an average of 41.27). As there was a positive correlation between language sampling in the student's native language and the language proficiency of the SLP in a language other than English as well as between language sampling in the student's native language and the percentage of caseload identified as bilingual, an additional correlation between language proficiency and caseload percentage was run, and yielded a significant positive correlation between language proficiency and caseload percentage. From this correlation, it can be concluded that SLPs who are fluent in a language other than English are more likely to have higher percentages of their caseload identified as bilingual than their monolingual counterparts.

SLP Bilingual Assessment Challenges

In addition to assessment practices, this survey also gained insight into SLPs' perceived preparation at the graduate level. Caesar and Kohler found that only 28% of their respondents agreed that their graduate education provided them with adequate theoretical knowledge concerning language evaluation of bilingual students, and 11.4% believed their graduate education provided them with enough practical experience in the area (2007). Arias and Friberg saw an increase to 38% of their respondents reporting an adequate theoretical basis on bilingual language assessment from graduate school education (2017). As previously mentioned, the current study reported 20.8% of respondents reporting they agreed that their graduate school training provided them with opportunities to gain practical experience working with bilingual clients. Both recent surveys report higher percentages in perceived preparedness at the graduate level than the 2007 study, indicating graduate speech language pathology programs are better incorporating bilingual language assessment into the curriculum. The current study does note a decrease from the 2017 study. However, the questions presented to the participants were different in that the 2017 study used the term "theoretical basis", whereas the current study used

“practical, clinical experience”. This distinction may play a role in the decrease in reported preparedness, as some regions within the United States do not have the diverse demographics to provide consistent, practical experience, whereas theoretical experience does not depend on this. Either way, it is telling that less than half of the participants in both recent surveys report feeling adequately prepared. No participants from the current survey “strongly agree” that their graduate school provided them with opportunities to gain practical, clinical experience conducting language evaluations with bilingual students. This would indicate that to some degree, the curriculum is lacking in this area within the field of speech language pathology. This lack of preparation is not without repercussion, as many SLPs now face difficulties in assessing bilingual students.

Participants were also asked to rate continuing education (CE) opportunities available to them online as well as at the state and national level. Responses indicate that a majority of Illinois SLPs neither agree nor disagree that CE opportunities at any level offer useful information regarding bilingual language assessment. In the open response question on the survey regarding assessment challenges, one respondent noted that there are “Not enough continuing education opportunities”. The final question on the survey administered to the participants was an open response question and asked “Do you have anything else you would like to share?”. One SLP responded that “universities should consider having 'workshops' or symposiums for current SLPs. I'm always looking for conferences that address the needs of ELL students”. Based on the results of the rating scales and these statements, it would seem that preparation for bilingual assessment at both the graduate and postgraduate level are lacking.

As previously mentioned the respondents to this survey report a wide variety of challenges when assessing bilingual students for language disorder. These challenges fit into four

categories: time, language/cultural differences, resources, and administration. Many respondents noted that in order to accurately measure a bilingual student's abilities, the SLP must assess both their native language and English. Therefore, an assessment takes twice as long. One respondent said that "It's difficult to fully evaluate skills in both languages within the allotted time, as many students (particularly 2nd-3rd grade and up) are fairly balanced bilinguals, not monolingual Spanish/dominant Spanish speakers who I might only formally assess in Spanish.". Another noted that "the bilingual nature means that the evaluation needs to be twice as long; most of my students do not just speak one language or the other but a mix of both and to fully see the language picture, i need to fully assess both.". Many school-based SLPs have large caseloads and are not given enough time to fully assess bilingual students. The mean caseload size of respondents to this study was 41.27. In addition, the respondents reported that an average of 47.33% of their caseload was bilingual.

Based on participants' responses to the question regarding challenges, SLPs are aware of potential issues in relying solely on standardized assessments. One respondent noted that "standardized tests aren't normed for bilingual [populations]". Another commented that the "biggest challenge is finding suitable assessment instruments to use with ELLs". These responses would indicate that standardized assessments, whether administered in English or the student's native language, does not provide sufficient information to differentiate between a language disorder and difference.

SLPs also reported challenges related to language and cultural differences. The most common challenge in this category was the difficulty finding and working with an interpreter/translator. One respondent, who reported working with trilingual populations, said that "creating informal probes, working with interpreters, determining difference vs. disorder,

and navigating cultural differences/expectations are all challenging with this population."

Additionally, SLPs appear to be limited by the resources available to them.

Clinical Implications

Regardless of SLP knowledge of supported assessment practices, there are still many barriers that prevent them from using them. It is important for SLPs to research and critically analyze the tools they use in assessment practices in order to provide the best services for their clients. SLPs should be conscious of both the tools they use to determine language disorder in bilingual clients and the external factors, such as caseload size, language proficiency, and graduate school preparation, that may influence them. Additionally, SLPs should be mindful of commonly reported challenges (available time, language/cultural differences, available resources, and administration) and develop strategies that will allow them to overcome them in order to best serve their clients. One way to do this may be to reach out to other SLPs working with bilingual clients and communicating with them. One respondent to the survey commented that "I'm so glad we are starting to talk about all this more". Creating spaces to communicate challenges can bring about solutions and increase awareness to the shortcomings of preparation and resources. In terms of bilingual assessment trends over time, reports of graduate preparation have risen and fallen from survey to survey. However, reports of using DA have increased. As this is shown to be an accurate and unbiased means of determining a language disorder in bilingual clients, SLPs should consider using this form of assessment.

Limitations

This study was somewhat limited due to its size. A total of 36 people partook in the survey, and the results of only 24 participants could be used. A majority of these participants were from the Northeast region of Illinois, and therefore did not represent practices of Illinois

SLPs as a whole. Though, these results are in and of themselves telling, as it may indicate a concentration of school-aged bilingual clients in the Chicago-land area. In addition to the participant pool for this study, there were several limitations regarding survey content. Since the current survey did not include questions related to the use of multiple assessment tools in conjunction, as well as provided a space to allow respondents to list frequently used assessments, a direct comparison to the previous two studies could not be made. Additionally, due to changes in wording between the current study and survey models, changes in reports of graduate preparation may be skewed.

Future Research

This study provided insights into SLP practices in Illinois and perceived graduate school preparation as it relates to bilingual language assessment. In future, it would be beneficial to administer similar surveys at a national level. This would provide further information into practices trends based on regions within the United States, based on population density, or bilingual population density. It would also be meaningful to create a study specific to the graduate preparation, continuing education opportunities, and resources that give SLPs most support in assessing bilingual students. Future studies aiming to compare results to previous survey models should include a space for participants to list frequently used assessments and be intentional with wording so as not to vary question meaning from survey to survey. In order to increase participation, future research could take advantage of Facebook groups dedicated to SLPs, school-based SLPs, or SLPs working with bilingual clients, and well as ASHA and ISHA special interest groups (SIGs).

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Appendix A

IRB Approval

August 26, 2020

Erin Zurek
Angela Anthony
Communication Disorders and Sciences

Dear Erin,

Thank you for submitting the research protocol titled, "SLP Practice and Assessment of Bilingual Students in Illinois" for review by the Eastern Illinois University Institutional Review Board (IRB). The IRB has reviewed this research protocol and effective 8/26/2020, has certified this protocol meets the federal regulations exemption criteria for human subjects research. The protocol has been given the IRB number 20-085. You are approved to proceed with your study. The classification of this protocol as exempt is valid only for the research activities and subjects described in the above named protocol. IRB policy requires that any proposed changes to this protocol must be reported to, and approved by, the IRB before being implemented. You are also required to inform the IRB immediately of any problems encountered that could adversely affect the health or welfare of the subjects in this study. Please contact me, or the Compliance Coordinator at 581-8576, in the event of an emergency. All correspondence should be sent to:

Institutional Review Board
c/o Office of Research and Sponsored Programs
Telephone: 217-581-8576
Fax: 217-581-7181
Email: eiuirb@www.eiu.edu

Thank you for your cooperation, and the best of success with your research.

John Bickford, Chairperson
Institutional Review Board
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Appendix B

Email Invitation

SLP Practice and Assessment of Bilingual Students in Illinois

You are invited to participate in a research study conducted by Erin Zurek and Angela Anthony from the Communication Disorders and Sciences Department at Eastern Illinois University.

PURPOSE OF THE STUDY

The purpose of this study is to compare recommended guidelines to daily practices used by school-based SLPs in assessing bilingual students. This survey will gather information on trends in bilingual assessment such as frequently used methods, resources available by district, and continuing education opportunities.

PROCEDURES

Participation is voluntary. If you choose to participate in the study, it will take 5-10 minutes of your time. You will be asked a series of multiple choice and short answer questions via the site surveyplanet.com.

POTENTIAL RISKS AND DISCOMFORTS

No risks or discomforts to participants are anticipated. Should you choose to participate, you have the ability to discontinue the survey at any time prior to submission of the survey. The data will be password protected and will not have any identifiers to tie answers directly to participants.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

The results of the survey will give SLPs a better understanding of the assessment practices for bilingual students in Illinois and how they compare to recommended guidelines. In addition, the data will give insights into the training and resources available to SLPs in bilingual assessments. With this information, SLPs can learn about ways to continue their education in bilingual assessment to support their students.

CONFIDENTIALITY

Any information that is obtained in connection with this study will remain confidential and will be disclosed only with permission or as required by law. If you include examples of your experiences with clients, please refrain from using names to ensure privacy of non-participants. All quantitative results will be presented in a summary format. Individual quotes from open-ended questions may be used, but any information that could identify an

individual or location will be removed. Only the principal investigator and faculty advisor will have access to individual survey responses.

PARTICIPATION AND WITHDRAWAL

Participation in this research study is voluntary and not a requirement or a condition for being the recipient of benefits or services from Eastern Illinois University or any other organization sponsoring the research project. Completion and submission of the survey indicates consent to participate in the study. As no identifying information will be collected, information cannot be withdrawn after the survey is submitted. There is no penalty if you choose not to submit the survey.

The survey can be found by clicking this link: https://s.surveymonkey.com/Km3h_zafE

IDENTIFICATION OF INVESTIGATORS

Questions about this study can be directed to:

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RIGHTS OF RESEARCH SUBJECTS

If you have any questions or concerns about the treatment of human participants in this study, you may call or write:

Institutional Review Board
Eastern Illinois University
600 Lincoln Ave.
Charleston, IL 61920
Telephone: (217) 581-8576
E-mail: eiuirb@www.eiu.edu

You will be given the opportunity to discuss any questions about your rights as a research subject with a member of the IRB. The IRB is an independent committee composed of members of the University community, as well as lay members of the community not connected with EIU. The IRB has reviewed and approved this study.

Appendix C

Statement regarding the term “bilingual” and COVID considerations

The goal of this survey is to gain more information on school-based SLPs’ practice in assessing bilingual students and how these practices compare to ASHA guidelines. For clarity and brevity, the term “bilingual” is used to encapsulate students identified as multilingual and/or English language learners. This includes students who are taught in English or in both their first language and English. We ask that you keep any students who fit this criteria in mind while answering these questions.

Due to the COVID-19 pandemic, this school-year likely includes procedures that may have affected your caseload or modality of service delivery. We ask that you answer the following questions with a typical school year in mind despite the outstanding circumstances.

Appendix D

Survey

- 1) Are you currently working as a school-based SLP?
 - a. Yes
 - b. No
- 2) Do you currently have bilingual students on your caseload?
 - a. Yes
 - b. No
- 3) What is your age?
 - a. 20-29
 - b. 30-39
 - c. 40-49
 - d. 50-59
 - e. 60+
- 4) What gender do you most identify with?
 - a. Male
 - b. Female
 - c. Transgender male
 - d. Transgender female
 - e. Gender variant/non-conforming
 - f. Prefer not to answer
 - g. Not listed
- 5) How would you describe your ethnicity?
 - a. American Indian or Alaska Native
 - b. Asian
 - c. Black or African American
 - d. Native Hawaiian or Other Pacific Islander
 - e. White
 - f. Prefer not to answer
 - g. Other (blank space provided)
- 6) Are you proficient in a language other than English? If so, what language?
 - a. No
 - b. Yes (blank space provided)
- 7) How many years of experience do you have as an SLP?
 - a. 0-5 years
 - b. 6-10 years
 - c. 11-15 years
 - d. 16-20 years
 - e. 21-25 years
 - f. 26-30 years
 - g. 31+ years
- 8) How many years of experience do you have as a school-based SLP?
 - a. 0-5 years
 - b. 6-10 years

- c. 11-15 years
 - d. 16-20 years
 - e. 21-25 years
 - f. 26-30 years
 - g. 31+ years
- 9) Which of the options below best describe the community you serve?
- a. Rural
 - b. Suburban
 - c. Urban
- 10) What region of Illinois do you serve? (Select all answers that contain counties you serve)
- a. Northwest (Jo Daviess, Stephenson, Winnebago, Carroll, Ogle, Whiteside, Lee, Rock Island, Henry, Bureau, Putnam, Mercer, Knox, Stark, Marshall, Henderson, Warren, Peoria, Woodford, Hancock, McDonough, Fulton, Schuyler)
 - b. Northeast (Boone, McHenry, Lake, DeKalb, Kane, Dupage, Cook, La Salle, Kendall, Will, Grundy, Livingston, Kankakee, Ford, Iroquois)
 - c. West (Adams, Brown, Cass, Mason, Tazewell, Logan, Menard, Pike, Scott, Morgan, Sangamon, Calhoun, Christian, Greene, Macoupin, Montgomery, Madison, Bond, Fayette, Jersey)
 - d. East (McLean, De Witt, Piatt, Champaign, Vermilion, Macon, Moultrie, Douglas, Edgar, Shelby, Coles, Cumberland, Clark, Effingham, Jasper, Crawford)
 - e. South (St. Clair, Clinton, Marion, Clay, Richland, Lawrence, Monroe, Washington, Jefferson, Wayne, Edwards, Wabash, Randolph, Perry, Franklin, Hamilton, White, Jackson, Williamson, Saline, Gallatin, Union, Johnson, Pope, Hardin, Alexander, Pulaski, Massac)
- 11) Mark all of the grades you currently work with:
- a. Pre-K
 - b. Kinderarten-2nd
 - c. 3rd-5th
 - d. Middle School
 - e. High School
- 12) How many clients are on your typical caseload? Please type your answer in number form.
(blank space provided)
- 13) What percentage of your typical caseload is bilingual? Please type your answer as a whole number without symbols. (blank space provided)
- 14) How often do you use the following method of assessment to determine language disorder in a bilingual student: **dynamic assessment**
- a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Almost always
- 15) How often do you use the following method of assessment to determine language disorder in a bilingual student: **standardized assessment administered in English**
- a. Never
 - b. Rarely
 - c. Sometimes

- d. Often
 - c. Almost always
- 16) How often do you use the following method of assessment to determine language disorder in a bilingual student: **standardized assessment administered in the student's native language**
- a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Almost always
- 17) How often do you use the following method of assessment to determine language disorder in a bilingual student: **language sample in English**
- a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Almost always
- 18) How often do you use the following method of assessment to determine language disorder in a bilingual student: **language sample in student's native language**
- a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Almost always
- 19) How often do you use the following method of assessment to determine language disorder in a bilingual student: **parent reports**
- a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Almost always
- 20) How often do you use the following method of assessment to determine language disorder in a bilingual student: **nonword repetition**
- a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Almost always
- 21) Other than the ACCESS, does your school/school district use any other tool to gain information on English proficiency in bilingual students? If so, what tools are used?
- a. No
 - b. Yes (blank space provided)
- 22) Does your school/school district use any other tool to determine the dominant language in bilingual students? If so, what tools are used?
- a. No
 - b. Yes (blank space provided)

- 23) Does your school have a bilingual classroom/learning environment? If so, for what grade levels?
- a. No
 - b. Yes (blank space provided)
- 24) I believe that my graduate education provided me with opportunities to gain practical, clinical experience conducting language evaluations with bilingual students.
- a. Strongly disagree
 - b. Disagree
 - c. Neither agree nor disagree
 - d. Agree
 - e. Strongly agree
- 25) I gain practical information for the assessment of bilingual clients from national conventions.
- a. Strongly disagree
 - b. Disagree
 - c. Neither agree nor disagree
 - d. Agree
 - e. Strongly agree
 - f. I do not attend national conventions
- 26) I gain practical information for the assessment of bilingual clients from state conventions.
- a. Strongly disagree
 - b. Disagree
 - c. Neither agree nor disagree
 - d. Agree
 - e. Strongly agree
 - f. I do not attend state conventions
- 27) I gain practical information for the assessment of bilingual clients from online courses.
- a. Strongly disagree
 - b. Disagree
 - c. Neither agree nor disagree
 - d. Agree
 - e. Strongly agree
 - f. I do not use this resource
- 28) What is/are your greatest challenge(s) in the assessment of bilingual children? (blank space provided)
- 29) Do you have anything else you would like to share? (blank space provided)